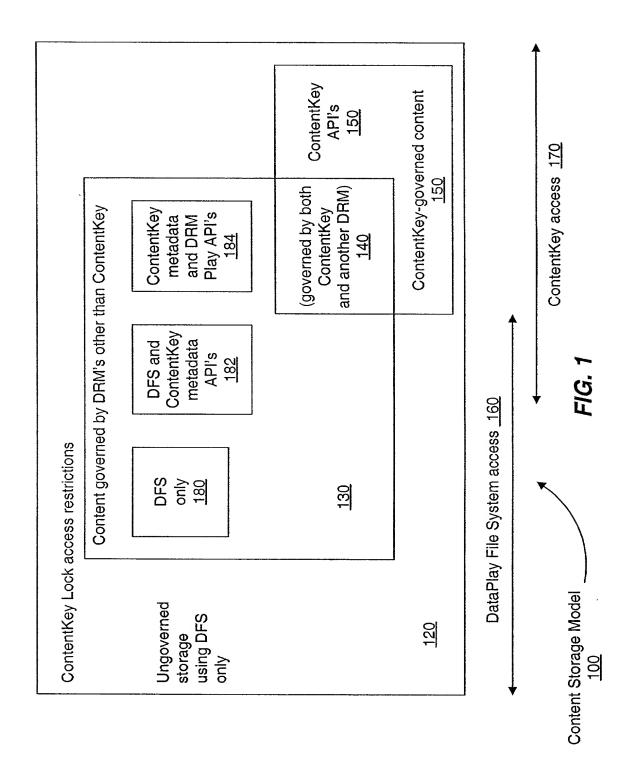
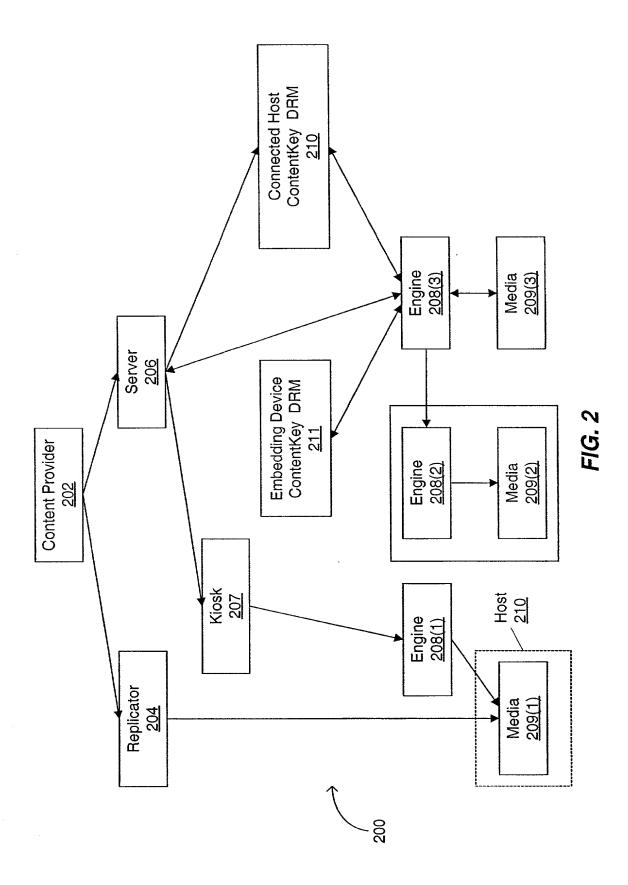
Lane W. Lee

Title:



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Title:



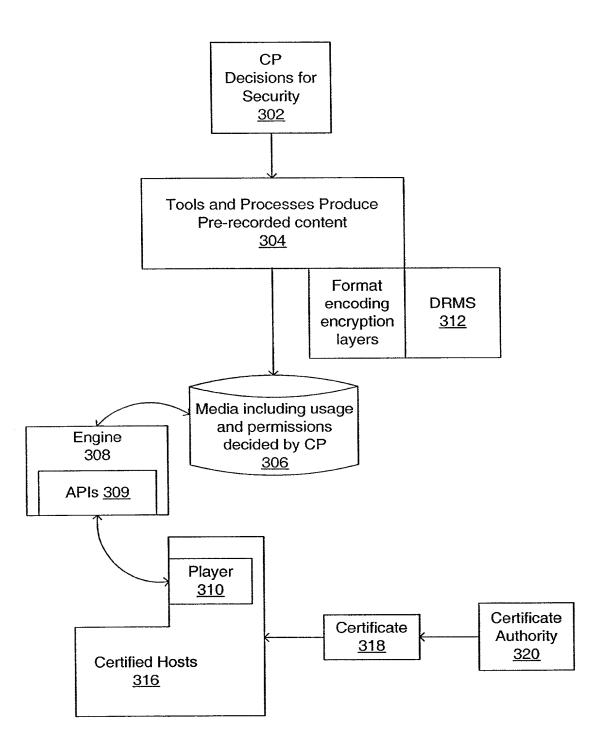
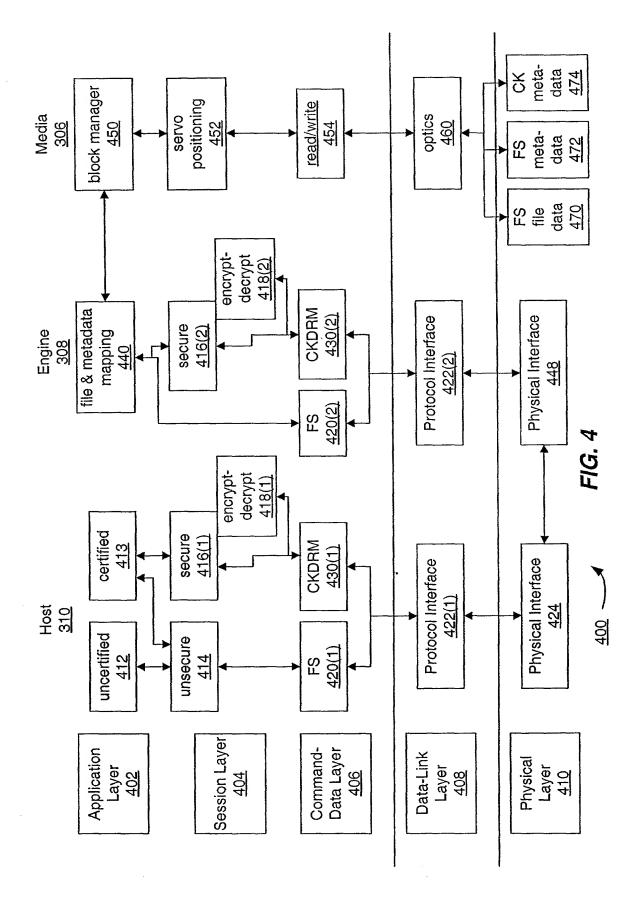


FIG. 3



Title:

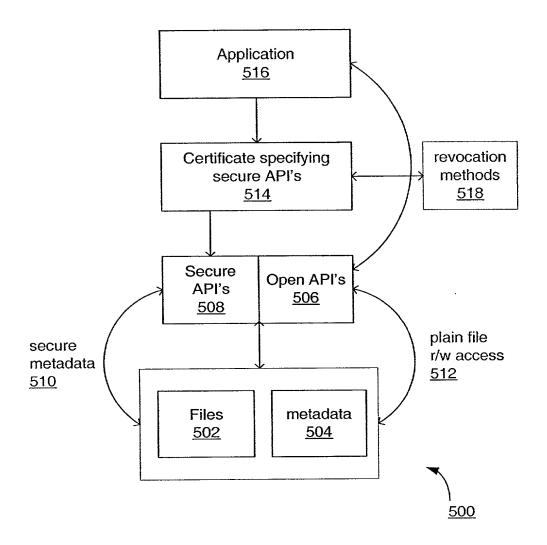


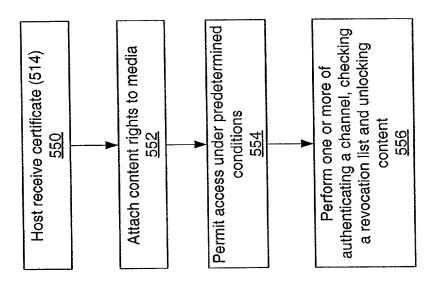
FIG. 5A

Attorney Docket No.: M-12042 US

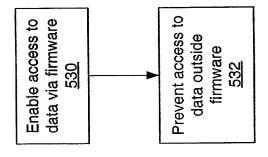
First Inventor:

Lane W. Lee

Title:

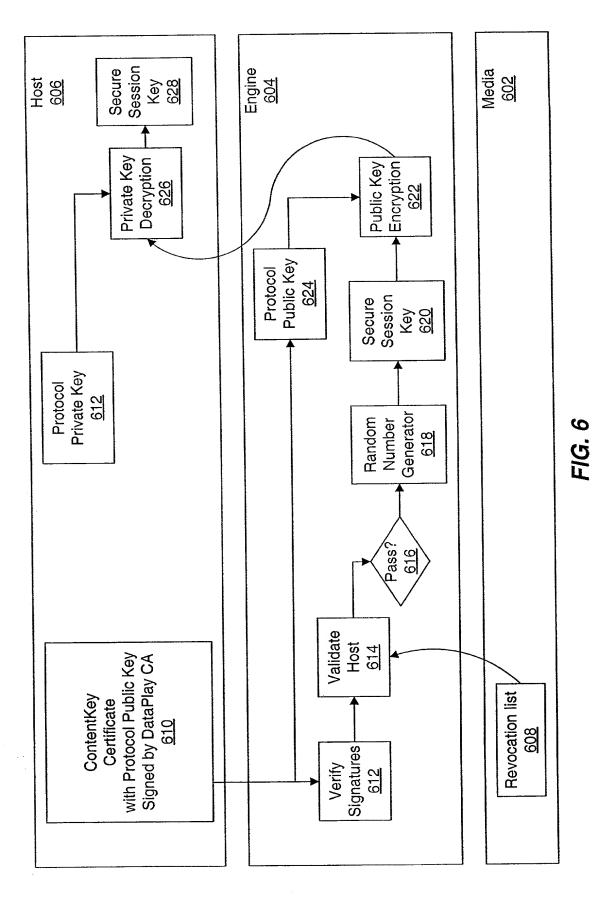


7G. 5C



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Title:

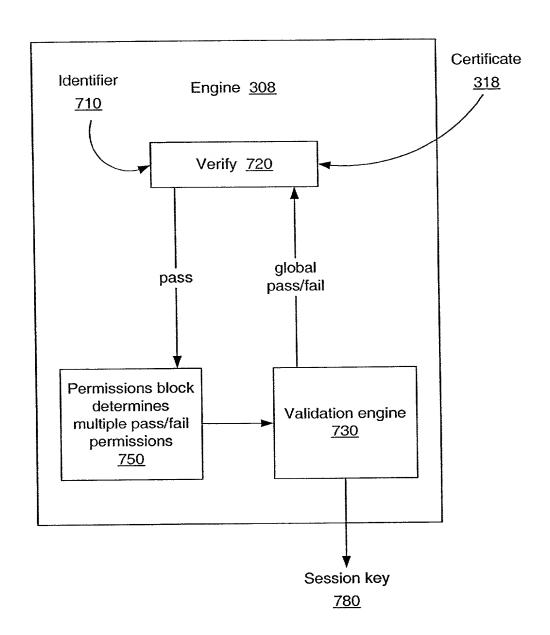


FIG. 7A

Use identifier to qualify

destination

704

Receive certificate from destination

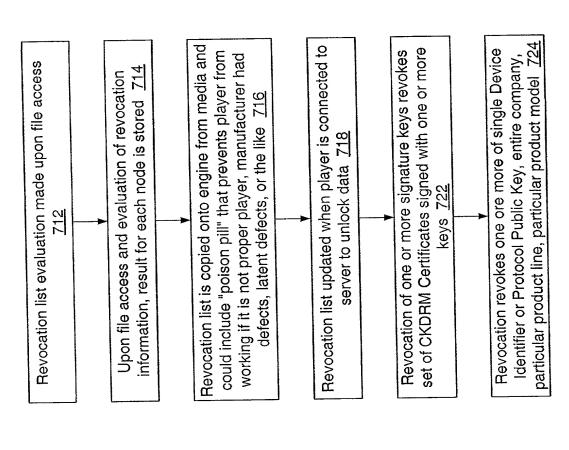
702

Transmit session key

907

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evaluated against contents of

of true or false when

CKDRM certificate 732

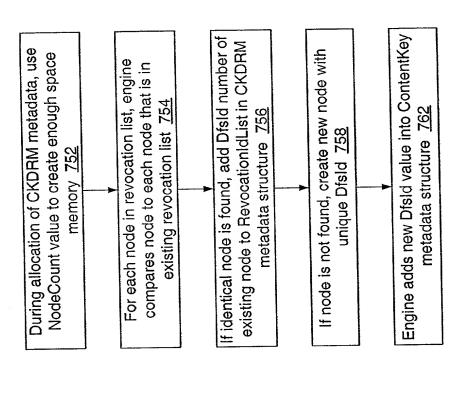
Evaluate data in clause node according to function results A Revocation System and Apparatus for Secure Content

Revoke host if any revocation

node in revocation list

evaluates to true

736



Combine results from clause

nodes according to clause

rules

734

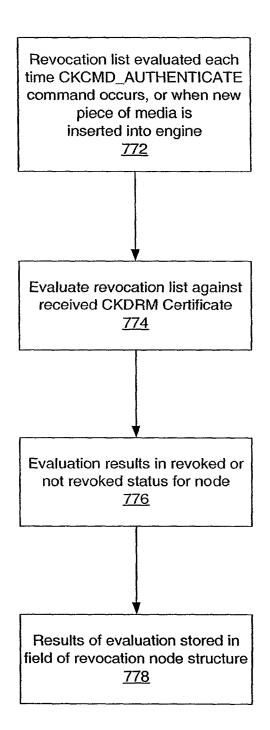


FIG. 7F

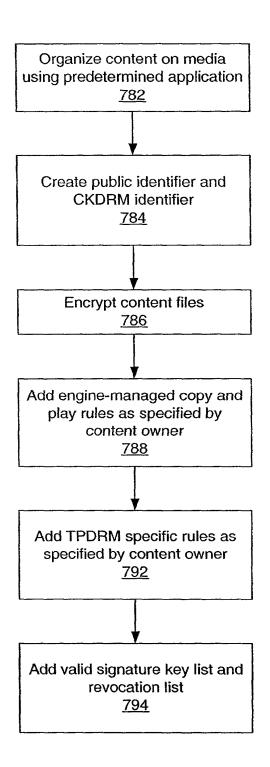


FIG. 7G

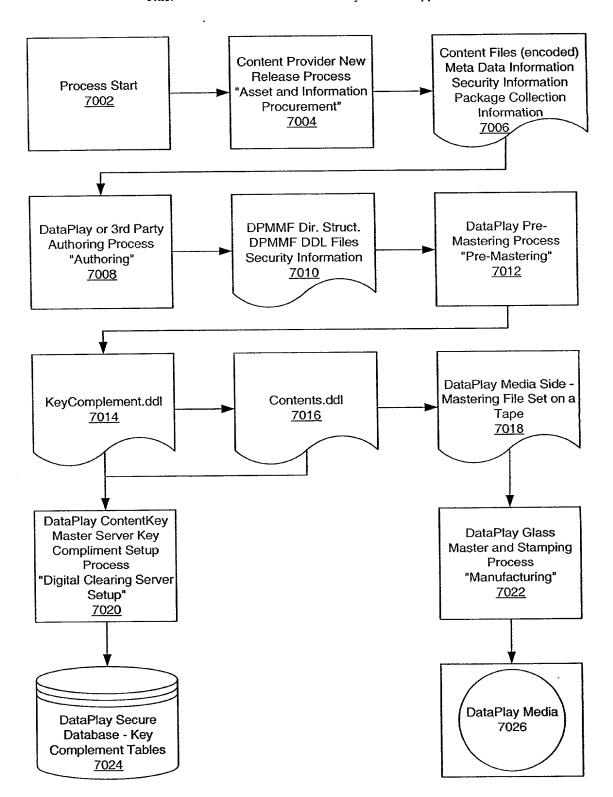


FIG. 7H

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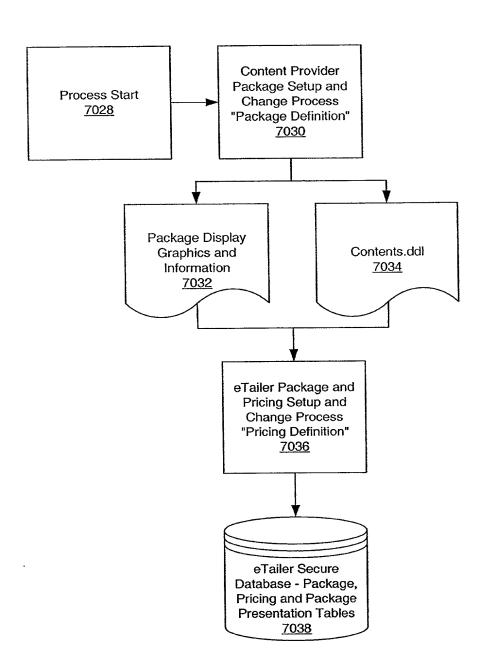


FIG. 71

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Title:

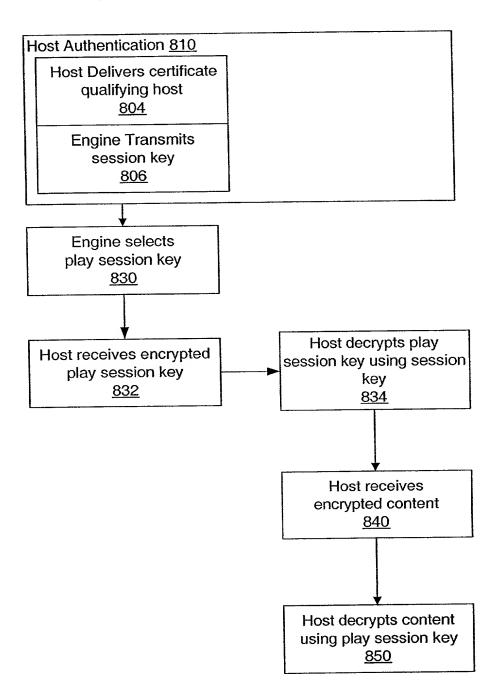


FIG. 8

Title: A Revocation

A Revocation System and Apparatus for Secure Content

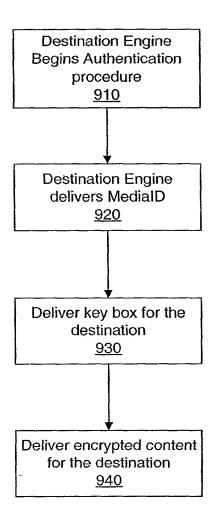


FIG. 9

and the state of t

Title:

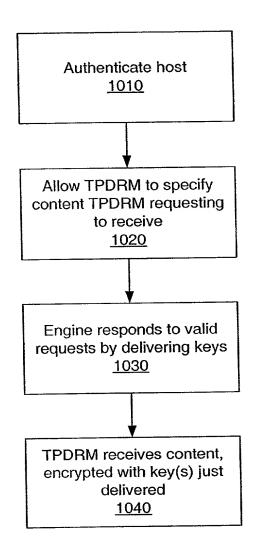


FIG. 10

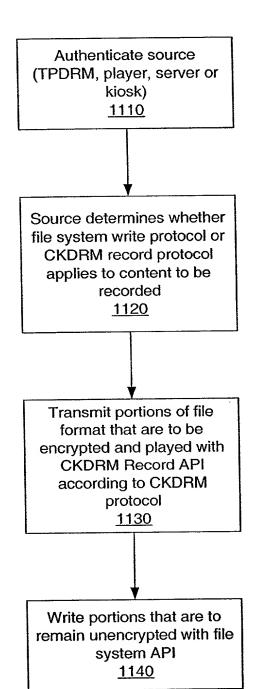


FIG. 11

First Inventor: Lane W. Lee
Title: A Revocation

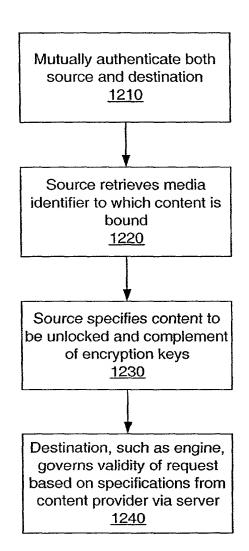
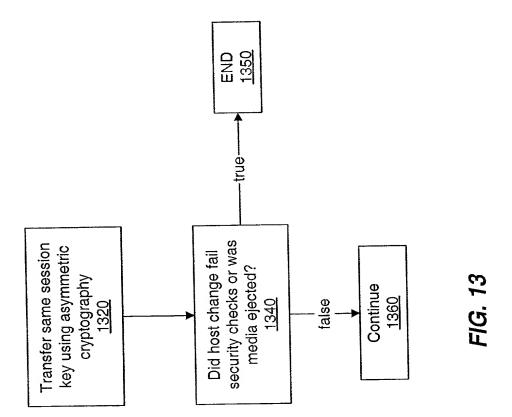


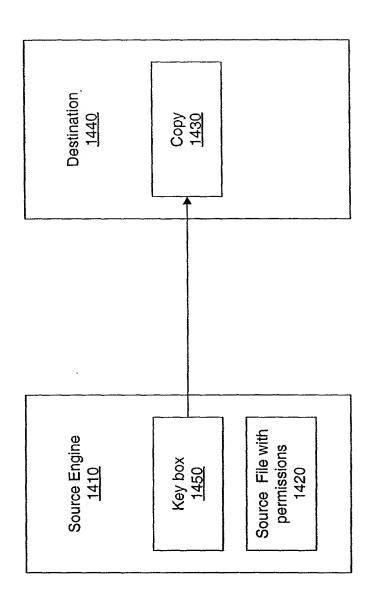
FIG. 12

Attorney Docket No.: M-12042 US
First Inventor: Lane W. Lee
Title: A Revocation



Lane W. Lee

Title:



Title: Lane W
A Revo

A Revocation System and Apparatus for Secure Content

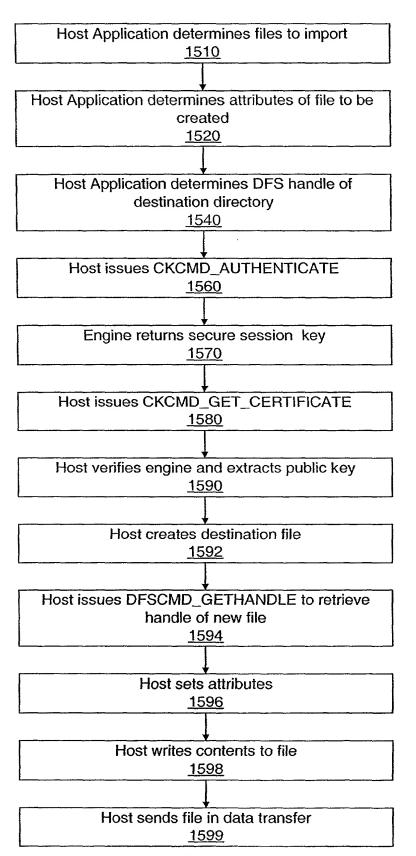


FIG. 15

Lane W. Lee

Title:

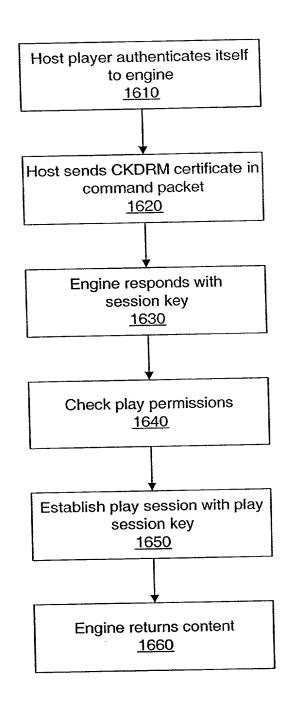


FIG. 16

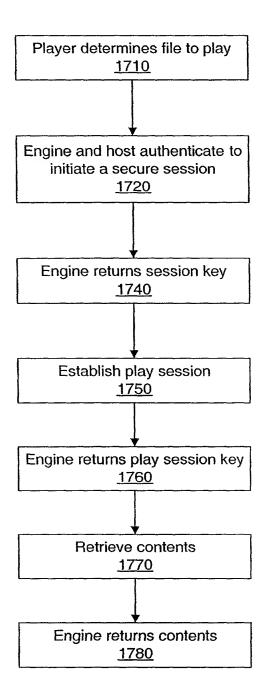


FIG. 17

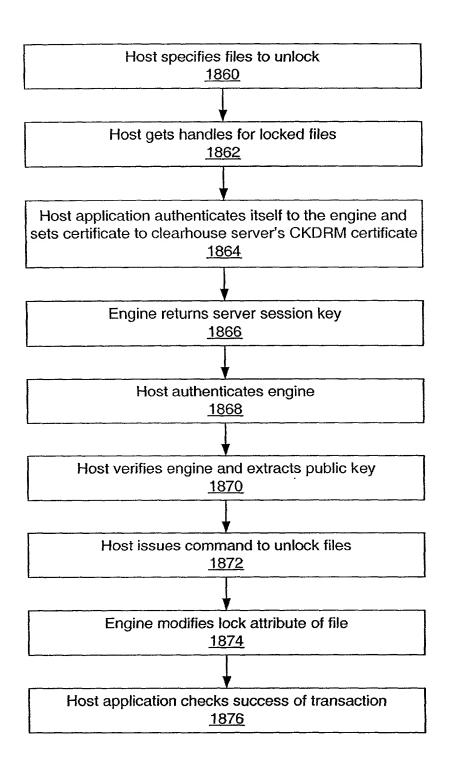


FIG. 18

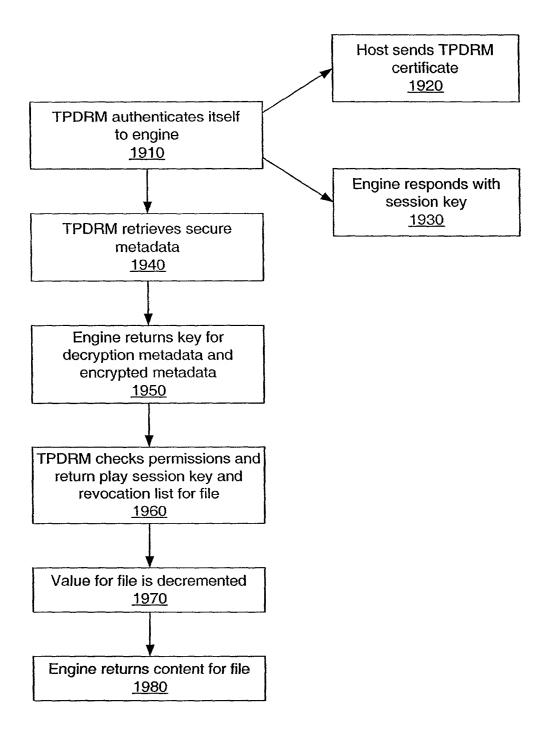


FIG. 19

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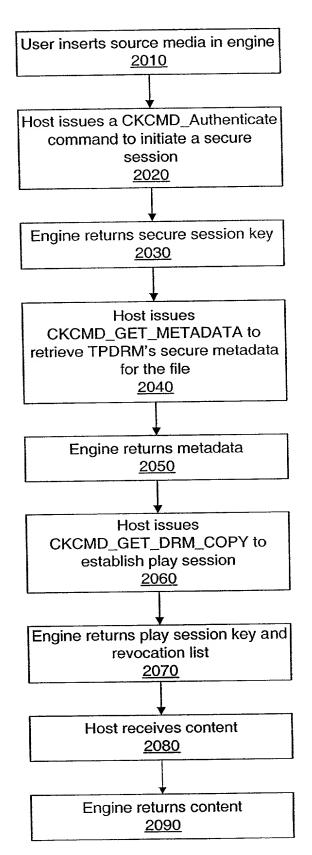


FIG. 20

Title: A Revocation System and Apparatus for Secure Content

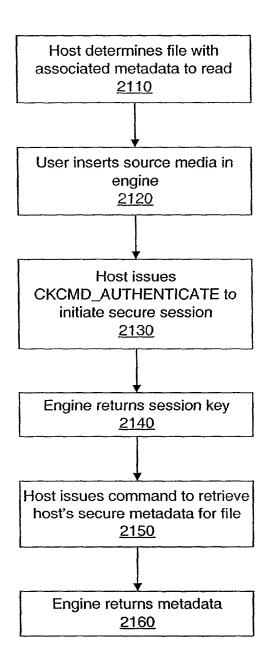


FIG. 21

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Title: A Revocation System and Apparatus for Secure Content

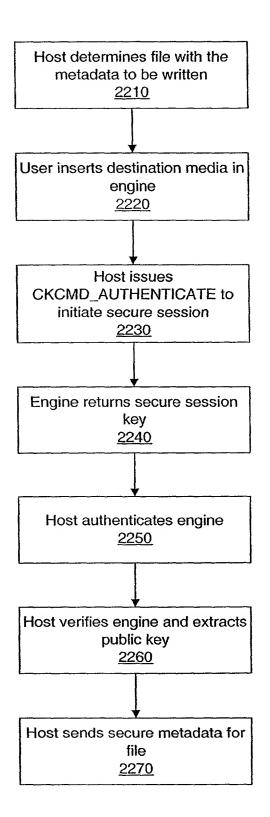


FIG. 22A

acon radioand for the expensive installment of the expensive for t

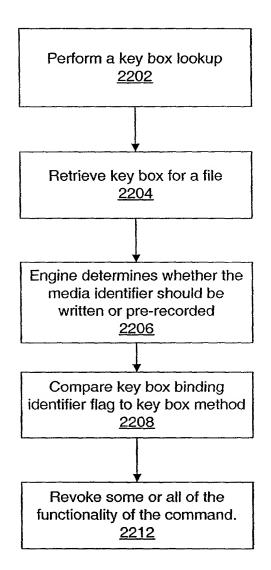


FIG. 22B

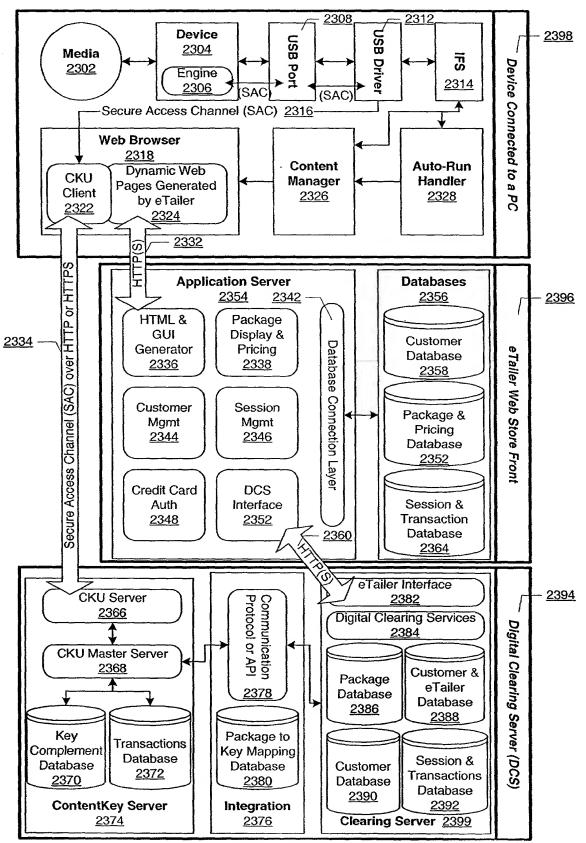


FIG. 23A

Title: A Revocation System and Apparatus for Secure Content

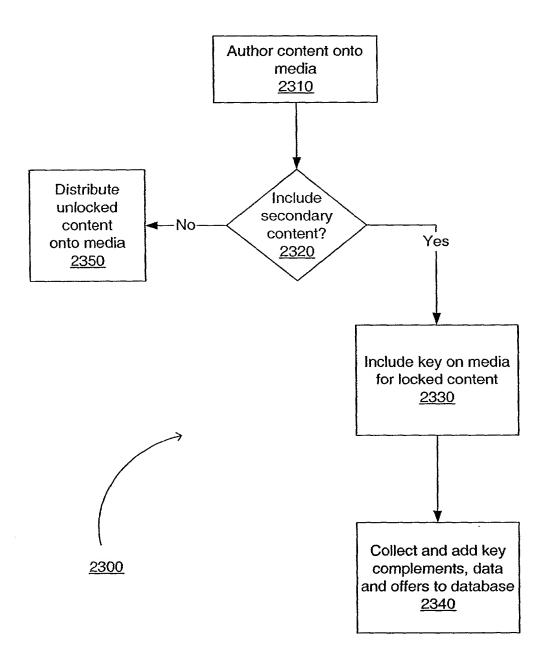


FIG. 23B

AND A SHIPMAN FOR THE REAL PROPERTY OF THE PROPERTY OF THE REAL PROPERTY OF THE REAL PROPERTY OF THE PROPERTY O

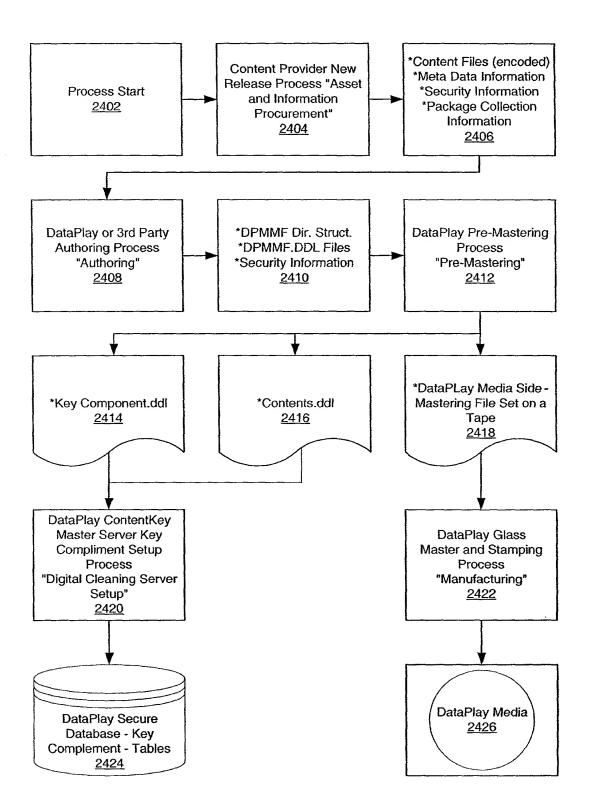


FIG. 24

Attorney Docket No.: M-12042 US Lane W. Lee First Inventor:

Title:

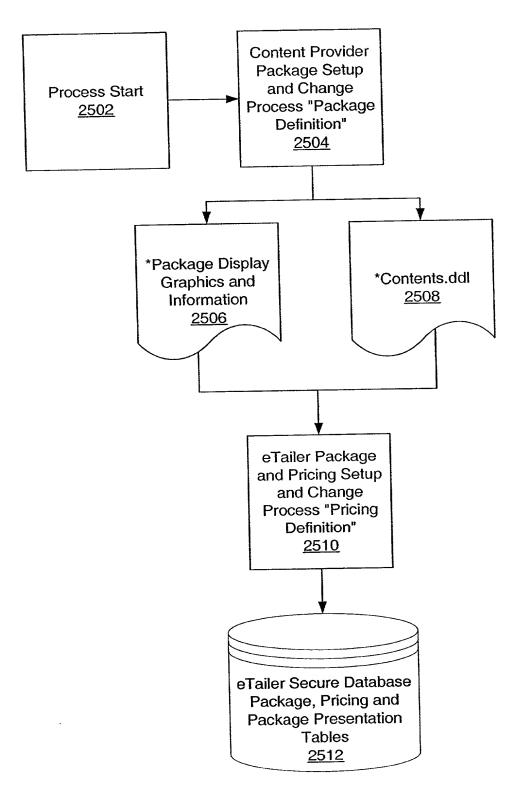


FIG. 25

Title: A Revocation System and Apparatus for Secure Content

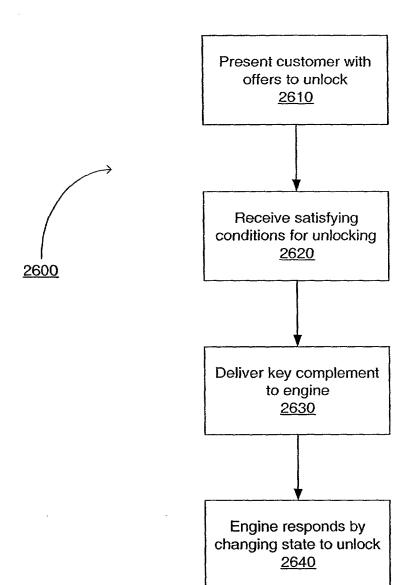


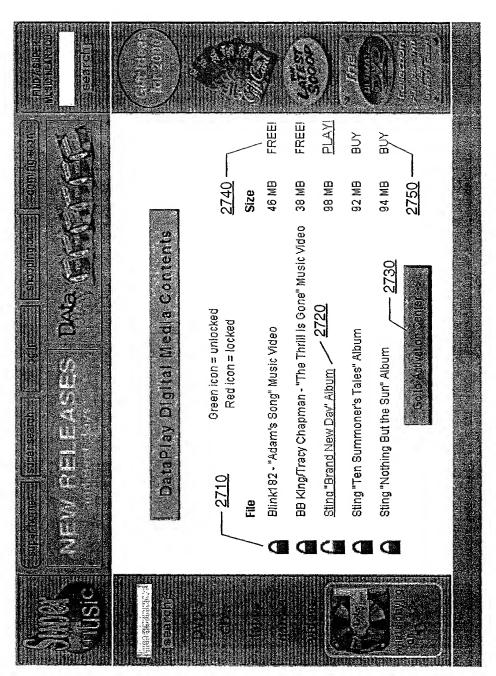
FIG. 26

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Lane W. Lee

First Inventor: Title:

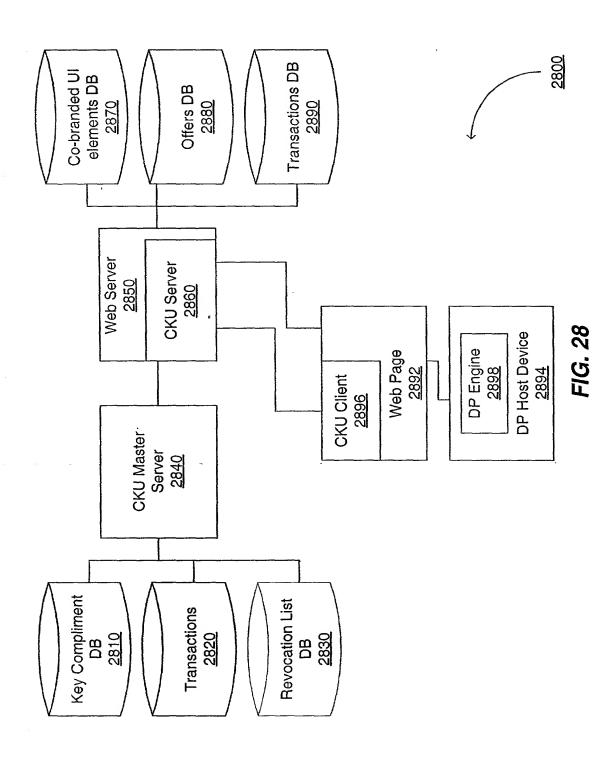


Attorney Docket No.: M-12042 US First Inventor:

Lane W. Lee

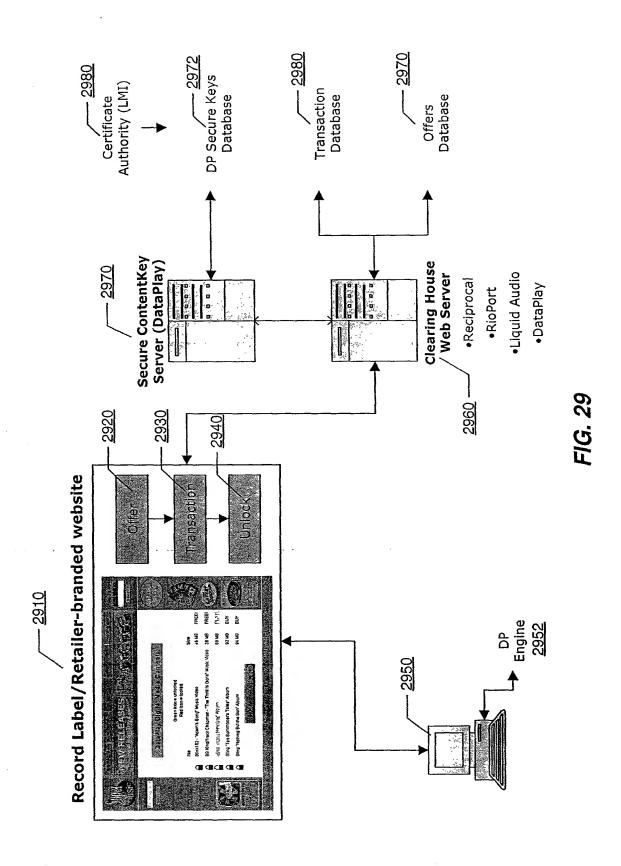
Title:

A Revocation System and Apparatus for Secure Content

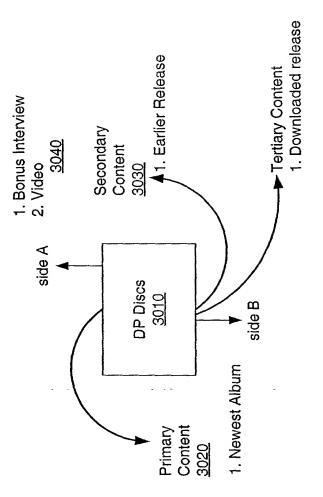


Title:

A Revocation System and Apparatus for Secure Content



Title: A Revocation System and Apparatus for Secure Content



7G. 30

Title: A Revocation System and Apparatus for Secure Content

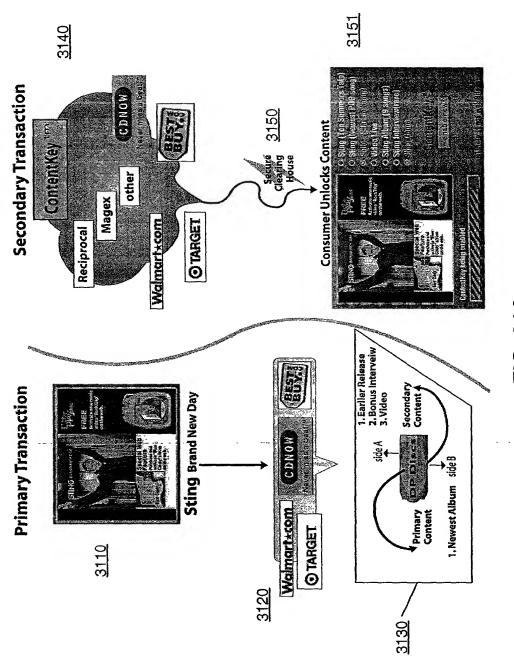


FIG. 31A

Title: A Revocation System and Apparatus for Secure Content

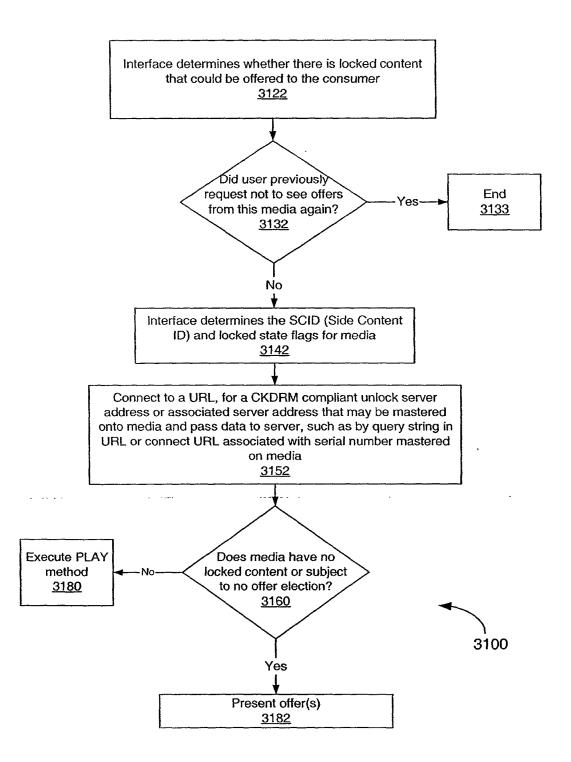


FIG. 31B

Title: A Revocation System and Apparatus for Secure Content

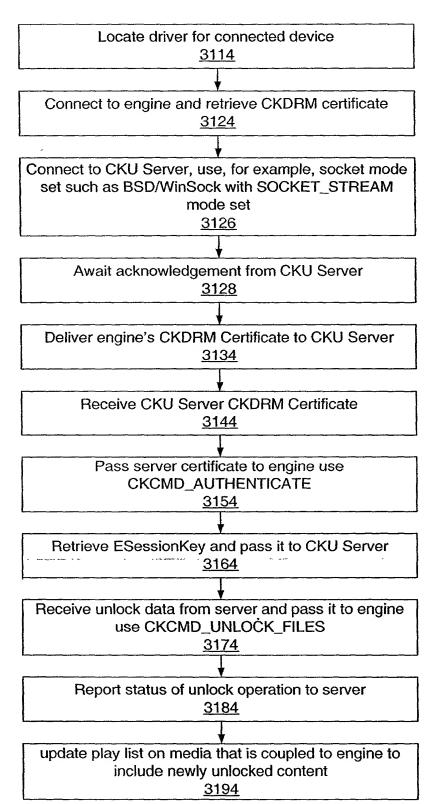
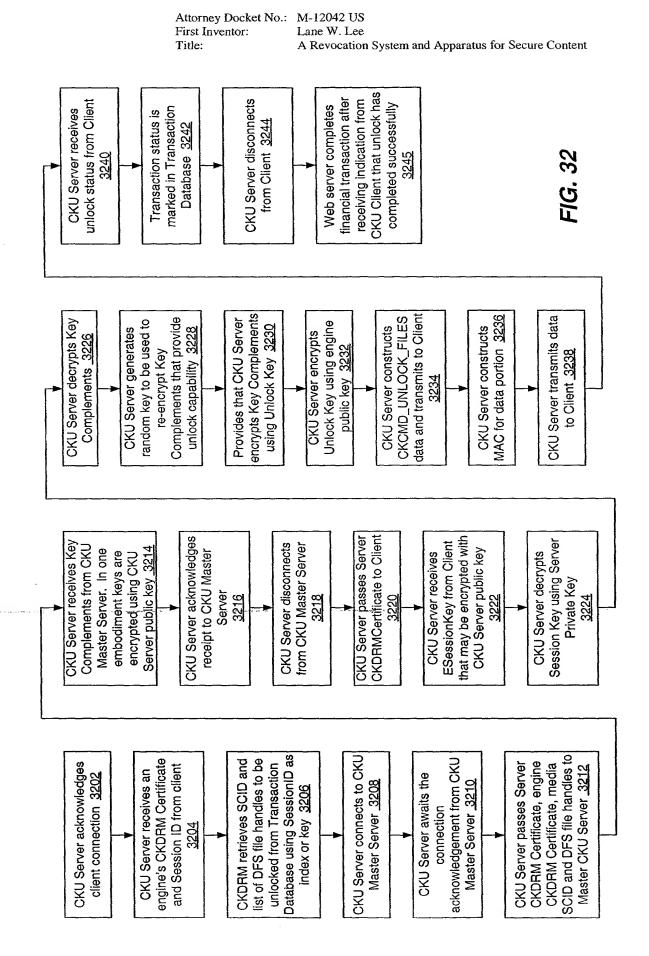


FIG. 31C



Title: A Revocation System and Apparatus for Secure Content

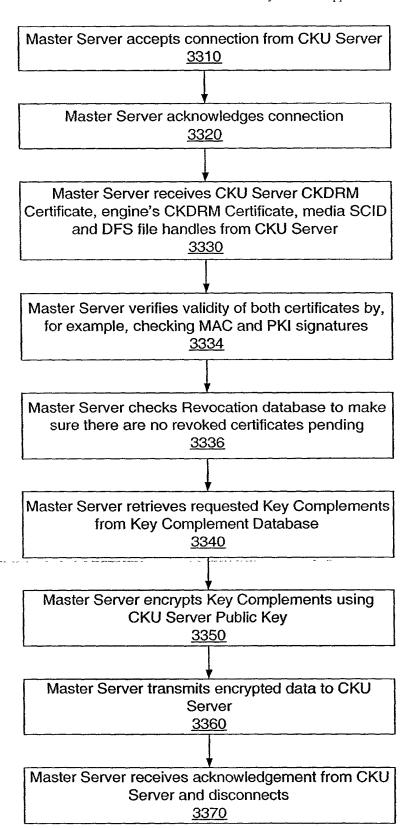


FIG. 33

and a site of the area of the control of the contro

Title: A Revocation System and Apparatus for Secure Content Client accesses formatted URL, such as URL on media disk or URL associated with serial number on media disk or other source 3410 Client presents query string containing SCID and locked content status 3420 Web server constructs page to present offers to consumer using data from Offers and UI Elements databases 3430 Web server delivers "Unlocking in Progress" page to client 3440 Web server generates unique SessionID that is used later to commit transaction after unlock process is verified 3450 Web page embeds CKU Client object and contains client-side script that tells CKU Client to begin unlock process 3454 Web server stores the SCID and list of DFS File Handles indexed by SessionID in Transaction Database for later use by CKU Server object <u>3456</u>

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First Inventor:

FIG. 34

instantiated and initialized with Session ID, SCID and

IP: PORT address for

CKU Server 3510

Deliver a page to client

CKU Client object is

CKU Client locates driver for device that contains media with content to be

offered 3512

engine's CK Certificate

3514

CKU Client makes

connection 3516

CKU Client obtains

Attorney Docket No.: M-12042 US First Inventor: Lane W. Lee Title: A Revocation System and Apparatus for Secure Content by sending event to event handler in web page 3590 acknowledgment or retransmit message 3576 Transaction Database and of transaction to web page **CKU Client reports status** CKU Server sends unlock CKU Server marks status CKU Client responds with error or unlock complete message to CKU Server Web page displays transaction status 3592 CKU Client sends either message to CKU Client CKU Server generates of unlock operation in disconnects from CKU 3572 Client 3580 random key retransmit message 3568 CKU Server responds with CKU Client responds with either acknowledgment or complements with private authentication command CKU Server transmits CKDRM Certificate to CKU Client using authenticate message **CKU Client constructs** packet to send through encrypted session key driver to engine 3562 Engine responds with Server in session key CKU Server decrypts acknowledgment or session key and key **CKU Client passes** session key to CKU retransmit 3560 message 3566 either server 3570 3558 ķe Ś Server responds with error receive error, CKU Server If certificates are invalld or associated database and CKU Server receives Key acknowledges receipt of pertificates in Revocation responds with retransmit checks for presence of revoked, CKU Master certificates are valid complements to CKU encrypts them 3550 **CKU Master Server CKU Master Server** CKU Master Server complements from If data mismatch or message 3548 message <u>3556</u> Complements, retrieves key transmits key Server 3552 data 3554 database transmits it to CKU Master acknowledgment or, if any problems occur retransmit CKU Server connects to corresponding record in accepts connection and CKU Server assembles Transaction Database CKDRM certificates of both engine and CKU message packet to **CKU Master Server** CKU Master Server CKU Master Server validates or denles CKU Server locates listening port 3536 CKU Master Server acknowledgment request keys and message <u>3538</u> responds with Server 3544 packet 3542 server 3540 replies with 3524

incoming connection from

CKU Server accepts

client and acknowledges

connection with acknowledgment message 3518

CKU Server responds with either an acknowledgment or retransmit message

3522

Certificate and SessionID

engine's CKDRM

to CKU Server 3520

CKU Client transmits

Title: A Revocation System and Apparatus for Secure Content

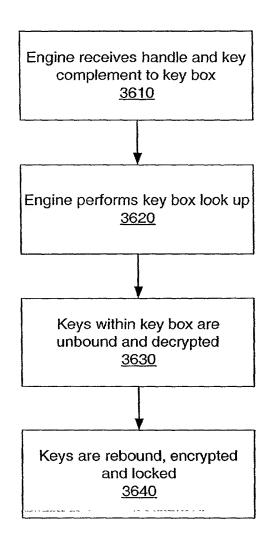
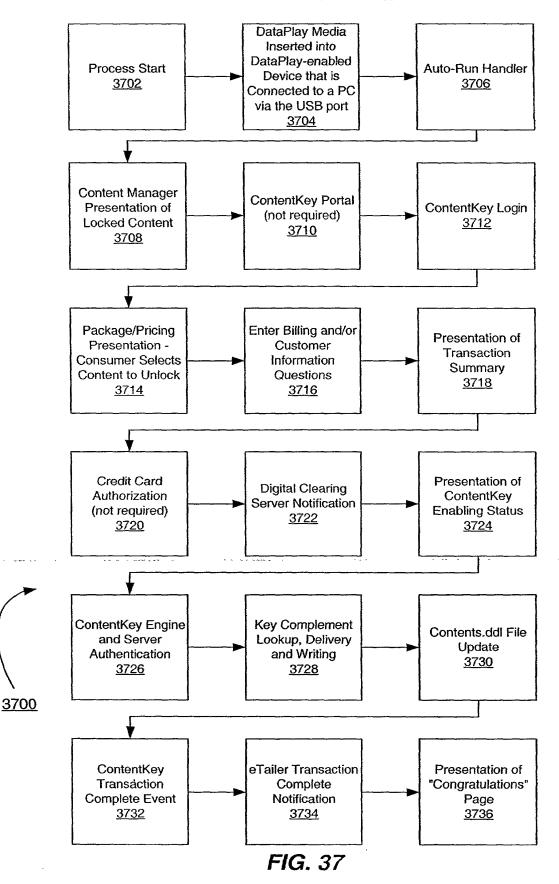


FIG. 36

Title: A Revocation System and Apparatus for Secure Content



Attorney Docket No.: M-12042 US First Inventor: Lane W. Lee Title: A Revocation System and Apparatus for Secure Content DCS Order Mgmt Server inserts records DCS_STAGE table with or without a Media ID 3802 DCS Order Mgmt Serve generates a web page with a CKU Client instantiated with a Transaction ID CKU Client obtains the Engine's CKDRM Certificate 3806 CKU Client obtains the unique Media ID (if this is not already established the engine will do so) 3808 CKU Client obtains the Server's ContentKey Certificate 3810 CKU Client obtains the ESessionKey from the Engine using the CKU Server's CKDRM Certificate 3812 CKU Client makes final unlock request for validating and/or updating the DCS_STAGE table with the Media ID, authenticating the Engine, obtaining the File Handle/Key Complement/Version list and Wrapping the File Set 3814 CKU Client sends the wrapped file set to the Engine so the Engine can unlock the content <u>3816</u> CKU Client sends the final transaction status message to the server and displays a "Trx Complete" message to customer/user 3818

FIG. 38

DCS Order Mgmt Server receives the status complete notice, and deletes DCS_STAGE records for that transaction and updates transaction 3820

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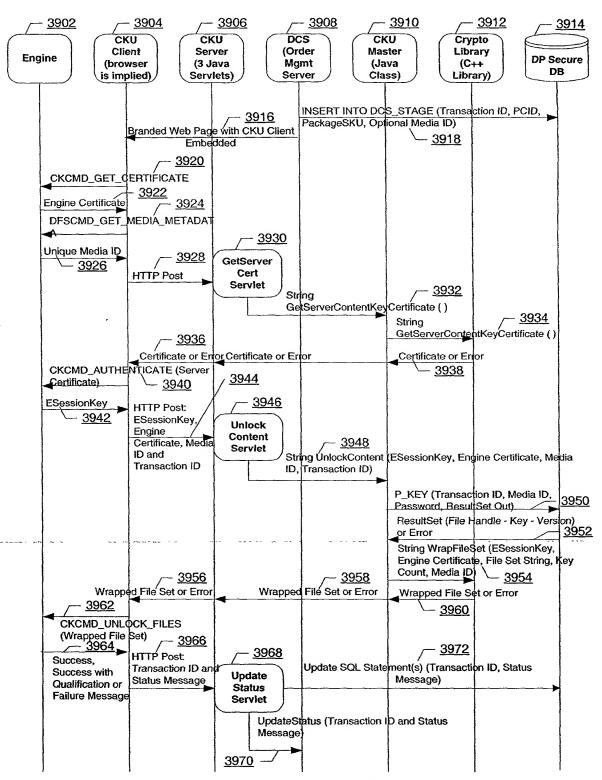


FIG. 39

A Revocation System and Apparatus for Secure Content Receive media containing locked content 4002 Auto-Run Handler (or Content Manager) requests and obtains a Contents.ddl file Auto-Run Handler (or Content Manager) parses the Contents.ddl fie to obtain the PackageCollectionID, PackageCollectionSKU, UnlockURL, Primary PackageSKU List + Business Entity ID, and a list of previously unlocked PackageSKU's 4006 Auto-Run Handler (or Content Manager) appends the data to the URL and opens the default browser which will display a web page created by the eTailer <u>4008</u> ETailer presents user/customer with a series of pages to process the eCommerce transaction 4010 After a user/customer completes the transaction (e.g. clicking button and prompting eTailer) thereby requesting eTailer to notify the DCS of the ContentKey Unlock Transaction, eTailer passes the DCS the PCID, and a list of PackageSKU's that are to be unlocked 4012 The DCS Order Mgmt component generates a unique Transaction ID and will insert one record for each Package purchased. At this point, the Media ID is not know so it will contain a null value. <u>4014</u> The DCS replies to the eTailer with a failure message or a URL that the user/ customer uses to unlock content. The Unlock URL contains the Transaction ID that was generated by the DCS. <u>4016</u> The eTailer generates a final confirmation and unlock instructions page that contains the Unlock URL. 4018

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First Inventor:

Title:

FIG. 40

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Title:

A Revocation System and Apparatus for Secure Content

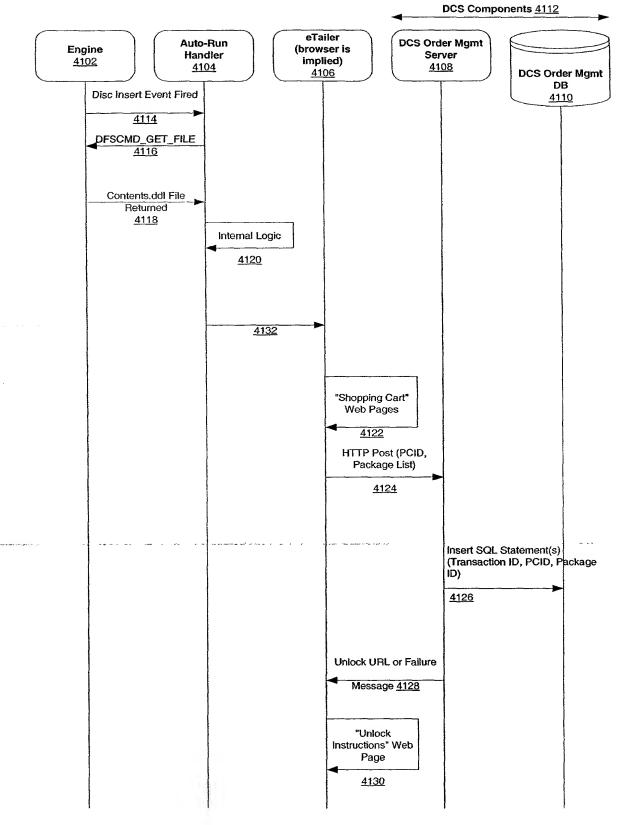


FIG. 41